

**REMARKS**

Claims 1 and 3–30 are pending in this application. By this Amendment, claims 1, 10, and 29 are amended, and claims 11–22 and 30 are canceled. Support for the amendments to the claims may be found, for example, in the specification at page 6, lines 1–14, and page 15, Table II, treatment numbers 53–57. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Rejection under 35 U.S.C. §112, Second Paragraph**

The Office Action rejects claims 1, 3–10, and 23–29 as being indefinite under 35 U.S.C. §112, second paragraph. By this Amendment, claims 1, 10, and 29 are amended in light of the Examiner's comments. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**II. Rejection Under 35 U.S.C. §102/§103**

The Office Action rejects claims 1, 3–5, 7, and 8 under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,777,223 to Xu ("Xu"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to recite, "applying consecutively said solutions from steps a) and b), by washing, or by circulation or recirculation, to the surface to be treated, thereby removing the biofilm" (emphasis added). Despite its asserted teachings, Xu does not teach such a feature.

Additionally, Applicants respectfully, but adamantly, disagree with the Office Action's assertion that Xu "clearly teaches that acylase would not necessarily be present if not so desired for the removal of a specific biofilm and to select from one or more of the other disclosed enzymes which are also claimed herein is inherent to the specific properties of the biofilm to be removed." *See* Office Action, page 7. In support of this assertion, the Office

Action cites to Xu, column 7, lines 50–55, which states, "The other enzyme(s) may be selected according to the properties of the specific biofilm which is to be removed, or a combination of several enzymes having different enzyme activities may be used" (emphasis added). "The other enzyme(s)" referred to by Xu are those that may be added in addition to acylase, not enzymes that can replace acylase.

This fact is made quite clear by simply reading the five paragraphs preceding the one cited by the Office Action. For example starting in column 6, line 62, Xu states, "The compositions comprising one or more acylases to be used in the methods of the present invention..." (emphasis added).

The very next paragraph starting at column 7, line 15, states, "The composition may be augmented with one or more agents for preventing or removing the formation of the biofilm. These agents may include, but are not limited to, dispersants, surfactants, detergents, other enzymes, antimicrobials, and biocides." There is nothing in this paragraph nor in any other part of Xu that would suggest that "the composition" referred to is nothing other than the said "the compositions comprising one or more acylases" referred to by Xu in the preceding paragraph. Therefore, Xu is teaching that the acylase composition may be augmented with the one or more agents, which agents include other enzymes.

Thus, when Xu refers to "one or more other enzymes" in the paragraph starting on line 40, column 7 ("In a preferred embodiment, the one or more other enzymes may be selected from the group consisting of..."), Xu is clearly referring to the one or more agents, which agents may include other enzymes, that Xu discloses may be used to augment the acylase composition. Likewise, throughout its disclosure, whenever Xu refers to "the one or more other enzymes" or "the other enzyme," Xu is referring to an enzyme or enzymes that may augment its acylase composition. Nowhere in its disclosure does Xu teach or suggest that its acylase composition does not require acylase. Everything in the Xu reference points to the

fact that its invention is directed to methods of removing a biofilm using an acylase composition.

Accordingly, acylase is a necessary component of Xu's composition for removing a biofilm. Despite the assertions made by the Office Action, Xu cannot fairly be said to teach or suggest "preparing a solution consisting of water, an optional buffer and an enzyme mixture containing at least one protease, at least one esterase and an amylase." Thus, Applicants respectfully submit that the rejection of the claims over Xu is improper and should be withdrawn.

For at least the reasons discussed above, Xu does not anticipate, and would not have rendered obvious claim 1. Claims 3–5, 7, and 8 variously depend from claim 1 and, thus, also are not anticipated by and would not have been rendered obvious by Xu. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

### **III. Rejection Under 35 U.S.C. §103**

The Office Action rejects claims 1, 3–10, and 23–39 under 35 U.S.C. §103(a) over Xu in view of U.S. Patent No. 6,762,160 to Barbeau et al. ("Barbeau"), U.S. Patent No. 5,238,843 to Carpenter et al. ("Carpenter"), and U.S. Patent No. 6,992,053 to Cermenati et al. ("Cermenati"). Applicants respectfully traverse the rejection.

The deficiencies of Xu with respect to claim 1 are discussed above. Despite their asserted disclosures, the other applied references fail to remedy the deficiencies of Xu with respect to claim 1. Accordingly, the applied references, considered either separately or in any combination, fail to teach or disclose each and every element of claim 1. Thus, the applied references would not have rendered obvious the subject matter of claim 1 or its dependent claims.

For at least these reasons, claim 1 would not have been rendered obvious by Xu, Barbeau, Carpenter, and Cermenati. Claims 3–10 and 23–39 variously depend from claim 1

and, thus, also would not have been rendered obvious by Xu, Barbeau, Carpenter, and Cermenati. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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